

What is claimed is:

1. A method for fabricating W-Cu alloy having a micro-homogeneous structure, comprising:

5 forming mixed powders by mixing tungsten powders with W-Cu composite powders;

forming a compact by pressurizing-forming the mixed powders;

forming a skeleton by sintering the compact; and

contacting copper to the skeleton and performing infiltration.

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2. The method of claim 1, wherein the W-Cu composite powders are obtained by a method disclosed in Korean Patent No. 24857, wherein homogeneous globular-shaped powders in which a tungsten powder covers a copper powder are obtained by mixing tungsten oxide ( $WO_3$  and  $WO_{2.9}$ ) powders 15 with copper oxide ( $CuO$  and  $Cu_2O$ ) powders, milling the mixture and performing reduction heat treatment.

20 3. The method of claim 1, wherein the mixture of tungsten powders and W-Cu composite powders has a tungsten: copper ratio by weight as 20 : 1 or 2 : 1.

4. The method of claim 1, wherein sintering of the compact is performed at a temperature not less than 1083°C as a melting temperature of copper in a reduction gas atmosphere including hydrogen.

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5. The method of claim 1, wherein infiltration of copper is performed at a temperature not less than 1083°C as a melting temperature of copper in a reduction gas atmosphere including hydrogen.

5 6. The method according to one of claims 1 ~ 5, wherein W-Cu alloy having a homogeneous micro-structure is fabricated by a method according to one of claims 1 ~ 5.

7. The method of claim 6, wherein W-Cu alloy having a  
10 homogeneous micro-structure is used as a material for high voltage electric contact of a contact braker and a material for heat sink of an IC semiconductor.

8. The method of claim 6, wherein W-Cu alloy having a  
15 homogeneous micro-structure is used as a material for a military shaped charge liner.